

Title (en)

METHOD FOR THE ELECTROSTATIC STRUCTURING OF A SUBSTRATE SURFACE AND RASTER PROBE LITHOGRAPHY METHOD

Title (de)

VERFAHREN ZUR ELEKTROSTATISCHEN STRUKTURIERUNG EINER SUBSTRATOBERFLÄCHE UND RASTERSONDEN-LITHOGRAPHIEVERFAHREN DAMIT

Title (fr)

PROCEDE DE STRUCTURATION ELECTROSTATIQUE D'UNE SURFACE DE SUBSTRAT ET PROCEDE LITHOGRAPHIQUE A SONDES A BALAYAGE

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Application

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Abstract (en)

[origin: WO2005088399A2] The invention relates to a method for the electrostatic structuring of a substrate surface (1a) by positioning a tip (4) applied to a flexible bar of an atomic power microscope, over the substrate (1), an electrical direct voltage being applied between the substrate (1) and the tip (4). The direct voltage and the distance between the tip (4) and the substrate (1) are selected in such a way that substrate material is electrostatically attracted by the tip (4), in a region (17) of the substrate (1) located essentially beneath the tip (4), and the surface of the substrate (17) is thus at least partially removed. The substrate (1) used is formed, at least on the surface (1a), from molecules with a defined expansion, that are bound together essentially by means of van der Waals forces. The invention also relates to a raster probe lithography method.

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